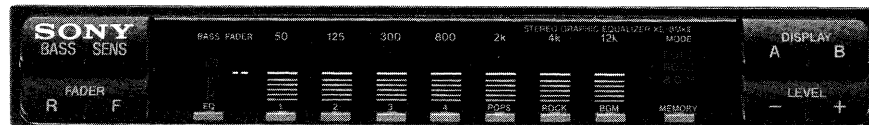


XE-8MkII

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model*



SPECIFICATIONS

Center frequencies	50 Hz, 125 Hz, 300 Hz, 800 Hz, 2 kHz, 4 kHz, 12 kHz
Boost/cut range	± 12 dB
Sub-woofer cut-off frequency	80 Hz, 120 Hz (at -3 dB) output gain $-\infty$ to $+8$ dB (cut-off slope -12 dB/oct)
Frequency response	5 Hz–100 kHz $+0$ -3 dB
Signal-to-noise ratio	more than 105 dB (A-weighted)
Harmonic distortion at 1 kHz	Less than 0.005%
Gain	0 dB

Others

Input	Line input (phono jack $\times 1$)
Output	Line output (phono jack $\times 3$)
Power requirements	12 V DC car battery (negative ground)
Current drain	600 mA
Input remote current	4 mA
Mounting dimensions	Approx. 178 $\times$ 25 $\times$ 135 mm (w/h/d) (7 $\frac{1}{8}$ $\times$ 1 $\times$ 5 $\frac{3}{8}$ inches)
Weight	Approx. 0.8 kg (1 lb 13 oz)
Accessories supplied	Mounting hardware (1 set) Connecting cord (1)

Design and specifications subject to change without notice.

FUSE REPLACEMENT

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.

Warning

Use the specified ampere fuse. Use of a higher amperage fuse may cause serious damage.

STEREO GRAPHIC EQUALIZER
SONY[®]

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
Specifications		1
Features		2
Service Note		2
SECTION 1. GENERAL		3
SECTION 2. ADJUSTMENT		7
SECTION 3. DIAGRAMS		
3-1. Printed Wirng Boards (AMPLIFIER Section)		8
3-2. Schematic Diagram (AMPLIFIER Section)		11
3-3. Printed Wirng Boards (MICRO COMPUTER Section)		14
3-4. Schematic Diagram (MICRO COMPUTER Section)		17
SECTION 4. EXPLODED VIEW		20
SECTION 5. ELECTRICAL PARTS LIST		21

FEATURES

- Graphic equalizer with fine four-colored liquid crystal 7-band spectrum analyzers
- Three types of equalization are preset—POPS, ROCK, BGM. Moreover four original curves of your own making can be stored.
- Low harmonic distortion and high dynamic range by Battery Mirror circuit
- Sub-woofer output function makes a powerful sound of low frequencies.
- For a 4-speaker system, the fader control is furnished.

Flexible Circuit Board Repairing

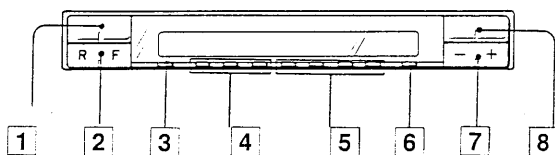
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 1 GENERAL

LOCATION AND FUNCTION OF CONTROLS



1 BASS/SENS (sub-woofer cut-off/spectrum analyzer sensitivity) buttons

BASS: to increase the bass parts
SENS: to change the extent of the spectrum analyzer indication

2 FADER R/F button

Use to adjust the volume balance between the front and rear speakers.

3 EQ (equalizer) button

Selects the speaker output to be compensated for. The EQ indicator (see page 4) is changed by pressing this button to F-R-FR-off. To restore the original sound, turn off the F and R indicators by pressing this button.

4 User's memory buttons

Press to store your original equalization curves or to recall the equalization curves stored. These buttons also act as frequency band select buttons corresponding to the display indication.

5 Sony's fixed memory buttons

Recall the equalization curves memorized for each type of music: POPS, ROCK and BGM. These buttons also act as frequency band select buttons corresponding to the display indication.

6 MEMORY button

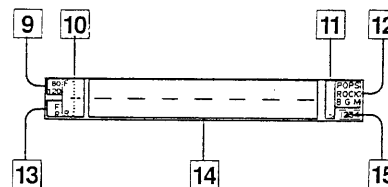
Use to store your own equalization curves.

7 LEVEL button

Press the "+" or "-" button when compensating for each frequency band, when adjusting the bass parts or when adjusting the volume balance between the left and right speakers.

8 DISPLAY A/B buttons

Select the type of indication in the display window.
A: changes to spectrum analyzer indication.
B: changes to equalizer indication.



9 Sub-woofer cut-off indicator

The cut-off frequency appears in this part.

10 FADER indicator

11 ► indicator

Shows the equalization curve which you have selected.

12 Sony's fixed memory indicator

13 EQ (equalization) indicator

Shows the speaker output to be compensated for.
F: the sound from the front speakers
R: the sound from the rear speakers
FR: the sound from both front and rear speakers

14 Display window

15 User's memory number indicator

DISPLAYING THE SPECTRUM ANALYZER

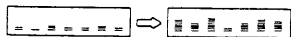
To Change the Sensitivity of the Spectrum Analyzer—Using the SENS button



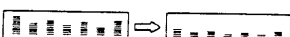
- 1 Press the DISPLAY A button.
The spectrum indications appear.
- 2 Press the SENS button.

When you press the SENS button

• When the deflection range of the spectrum analyzer is too narrow:



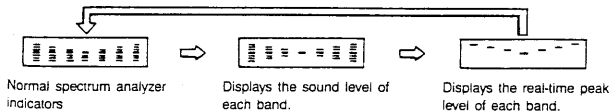
• When the deflection range of the spectrum analyzer is too wide:



When listening to the sound with high volume and the deflection range is too wide, narrow the range by pressing the SENS button.

To Change the Modes of the Spectrum Analyzer

Each time you press the DISPLAY A button, the display changes as follows:

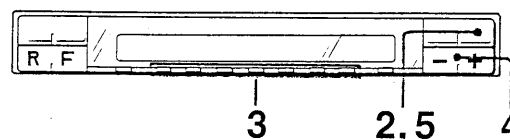


Normal spectrum analyzer indicators

Displays the sound level of each band.

Displays the real-time peak level of each band.

COMPENSATING FOR THE SOUND



- 1 Operate the car stereo.
- 2 Press the DISPLAY B button twice.
The indicators in the display window begin to blink.
- 3 While the indicators are blinking, press the frequency band select button to be used for compensation.
The indicator whose button is pressed will stop blinking.
- 4 Press the + or - button.
Keep the + or - button pressed until you reach the desired level, or press it repeatedly.
→ Repeat the steps 3 and 4 for each frequency band.
- 5 Press the DISPLAY B button.
When the equalization curve is displayed, the compensation is finished.

When you want to memorize an equalization curve of your own making, see "Storing Equalization Curve of Your Own Making" on page 8.

When you press a button

A short beep sound will be heard to let you know that the button is pressed correctly. If the beep sound is not heard, press the button again.

When the LEVEL button is pressed continuously

The indicator in the display window continues to move, and if the indicator comes to the maximum or the minimum point, a beep will be heard.

After approximately 20 seconds

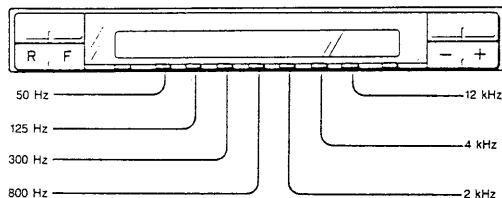
The blinking of the indicators will stop and the compensation cannot be made. In this case, repeat the procedure from step 2.

When you want to cancel the compensation

Press the DISPLAY B button while the indicators are blinking.

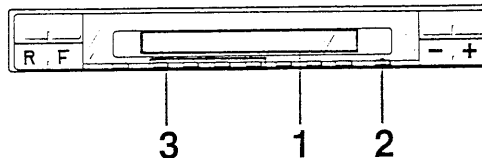
FOR BETTER SOUND COMPENSATION

Press the LEVEL (+ or -) button once to move the indicator in the display window one step to the positive (+) or negative (-) direction. If the adjustment does not produce the anticipated improvement, press the button to move the indicator to its center position and try to adjust again.



50 Hz	Use to boost or cut heavy bass. By cutting, the resonance with the car body can be reduced.
125 Hz	Use to boost or cut the normal bass in a piece of music.
300 Hz	This governs the low-middle range and greatly influences the overall characteristics of the sound.
800 Hz	Use to provide more presence for vocals.
2 kHz	Use to obtain a brighter brass sound or reduce stridency.
4 kHz	Use to adjust the brightness of a sound.
12 kHz	This affects general treble.

STORING EQUALIZATION CURVES OF YOUR OWN MAKING



- 1 Display the frequency curve to be memorized.
(See "Compensating for the Sound" on page 6.)
- 2 Press the MEMORY button.
(Press this button after the equalization curve to be stored is determined.)
The equalization curve and user's memory numbers will blink for about 8 seconds.
- 3 While the curves and numbers are blinking, press a desired memory button.
The equalization curve and the user's memory numbers stop blinking to show that the curve has been stored.

To correct the stored curve

Store a new equalization curve over the last stored curve. The last curve will be erased and the new curve will be stored.

Note

The blinking of the equalization curve will stop after approximately 8 seconds. If it stops, the curve can not be stored. In this case, repeat the procedure from the first.

LISTENING WITH STORED EQUALIZATION CURVES



Press the desired memory button.

(The equalization curve will be displayed, and you can hear the equalized sound with the desired equalization curve.)

How to use the memory for equalization

The curves preset in the POPS, ROCK, and BGM buttons are those considered effective for each type of music. Make your own original sound by referring to these curves.

1-4: user's memory

POPS: for vocal and popular music

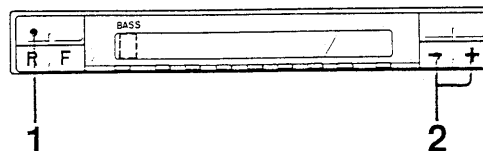
ROCK: for rhythm, such as jazz and rock

BGM: for classic and mood music

ADJUSTING HEAVY BASS —USING THE BASS BUTTON

The sound from the speakers connected to the SUB W. (sub-woofer) outputs can be boosted by cutting off the frequencies higher than 80 Hz or 120 Hz.

Adjust the optimum sub-woofer response to the acoustic characteristics of a car room or speaker.



- 1 Press the BASS button to select 80 or 120.
- 2 Press the + or - button to adjust the level of the sub-woofer speakers, while the indication appears.

Each time you press the BASS button

The 80, 120 indication and no indication appear in turn.



80: to cut off higher than 80 Hz

120: to cut off higher than 120 Hz

No indication: No sound from sub-woofer speakers

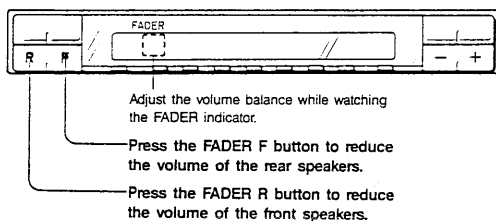
The indication of the strengthened level remains lit for approximately 8 seconds by pressing the BASS button.

Note

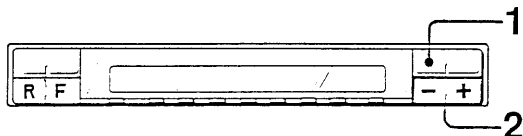
When you press one of the memory buttons while spectrum analyzer is displayed, the equalization curve will appear for a few seconds and then return to spectrum analyzer indication.

ADJUSTING THE SOUND BALANCE

To Adjust the Volume Balance between the Front and Rear Speakers
— Using the FADER button



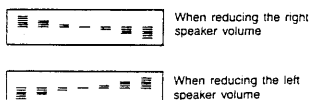
To Adjust the Volume Balance between the Right and Left Speakers



- 1 Press DISPLAY A button.
The spectrum indications appear.
- 2 Press the + or - button to adjust the volume balance.
+: press to reduce the volume of the left speaker.
-: press to reduce the volume of the right speaker.

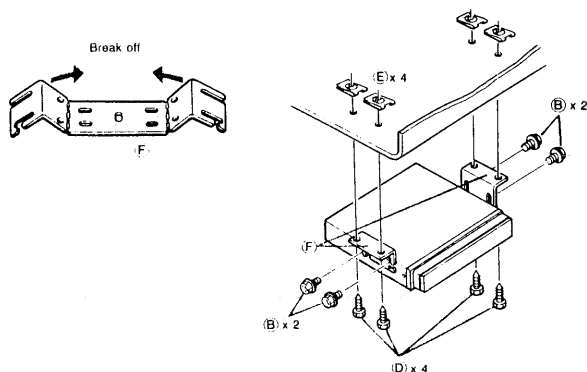
If you continue to press the FADER button
The FADER indicator continues to change. When the indicator comes to the maximum or minimum point, a beep will be heard.

Spectrum analyzer indicators when adjusting the volume balance



Mounting Example

Example 1



Use the supplied mounting hardware.

- 1 Mark the locations of the holes on the bottom of the dashboard using the part (F) as a template.
- 2 Drill 3 mm bolt holes.
- 3 Secure the pieces of part (F) which are broken off to the bottom of the dashboard*.

- 4 Secure the unit to part (F).

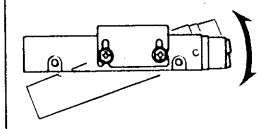
* If the dashboard or the firewall is thin or made of plastic or a similar material, secure the unit with tapping screws and tinnerman clips (E). If it is made of metal plate, the tinnerman clips are not necessary.

The unit can be installed inside the dashboard using an optional in-dash installation kit.

Notes

- Be sure to use the supplied bolts (B) for mounting part (E) on the unit. Longer bolts will damage the unit.
- Be careful not to damage wiring or equipment on the other side of the firewall.

The mounting position, height and angle can be adjusted as illustrated below.



INSTALLATION

Precautions

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or from hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

Caution

- This unit is designed for negative ground 12V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the yellow power input lead only after all other leads are connected. And be sure to connect it to the positive 12 V power terminal
- Run all ground wires to a common ground point.

Note on amplifier and program source connection

The red jacks of the XE-8MkII/90MkII are for the right-channel connection and the white jacks for the left-channel.

CONNECTIONS

When the sound level seems high

When using source equipment of manufacturers other than Sony, adjust the output level of this equalizer by setting the LEVEL switch to LOW. Be sure to set it to SONY STD when using Sony source equipment.

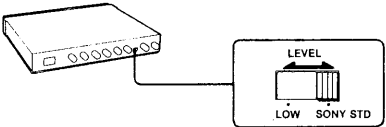
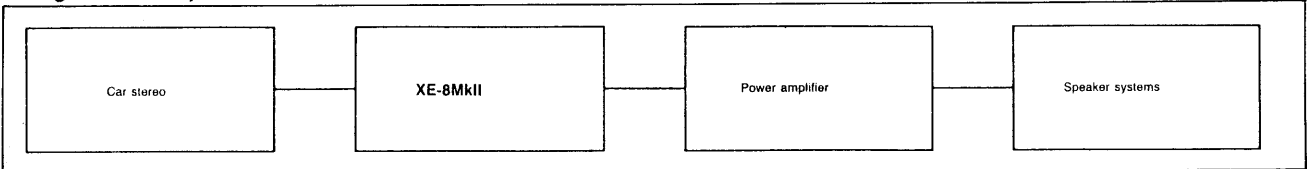
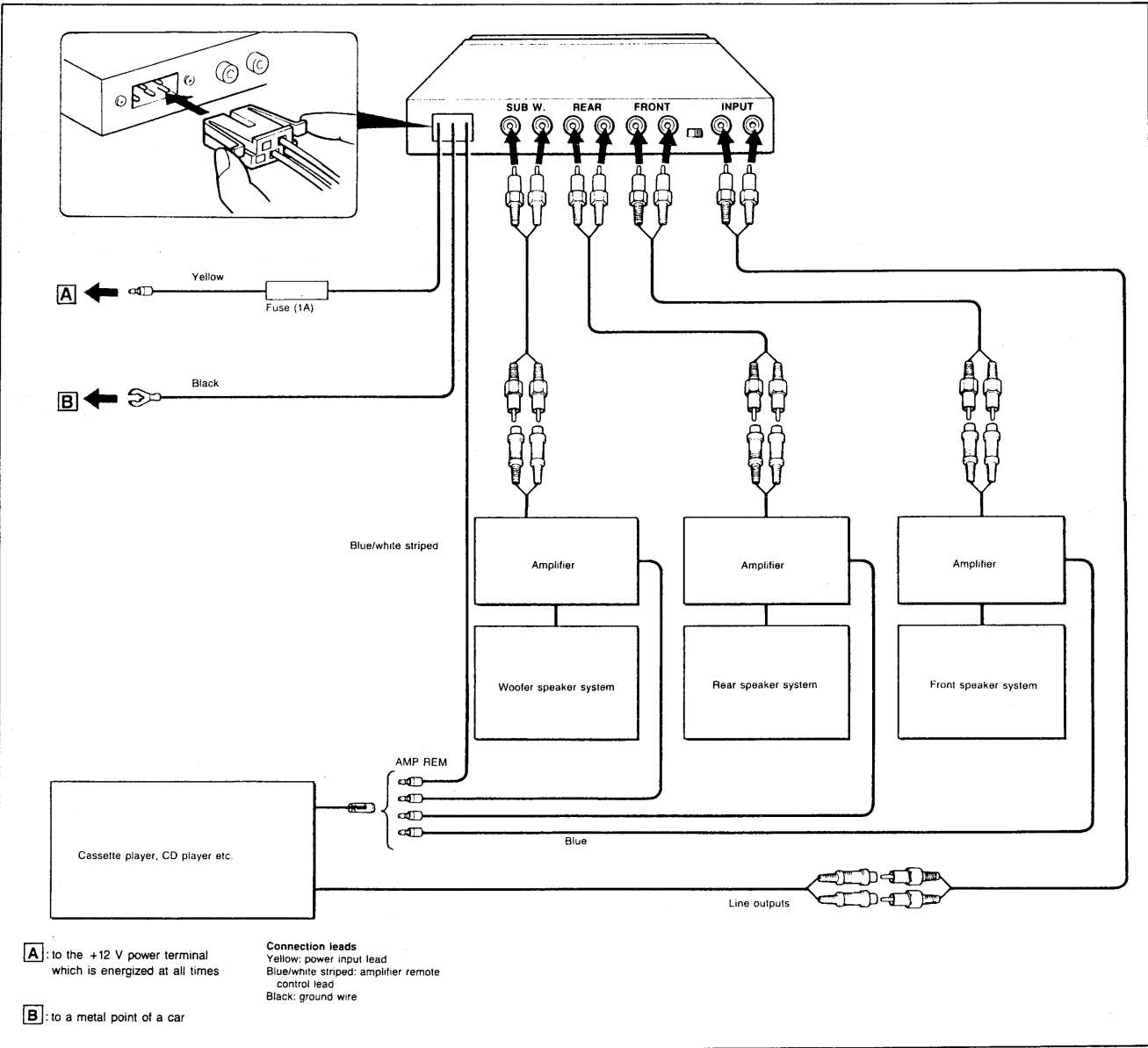


Diagram of Example



Connection Diagram



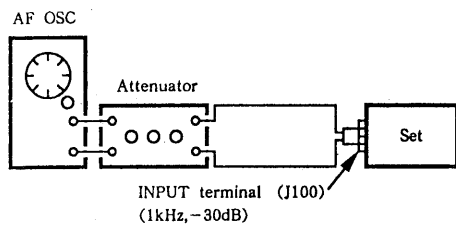
SECTION 2 ADJUSTMENT

Note : Adjust After repairing or replacing the firststage amp, equalizer amp or RV501 on the AMPLIFIER (AUDIO) PC board.

[LCD Adjustment]

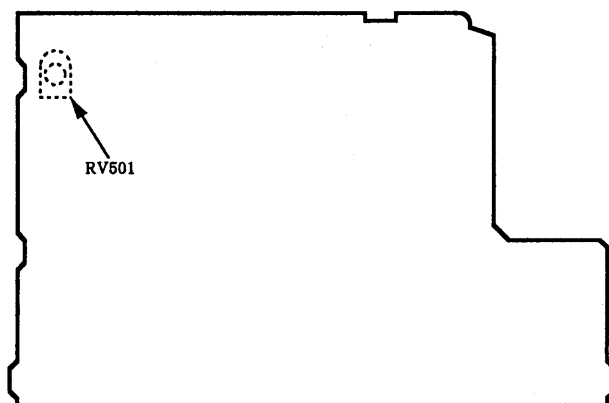
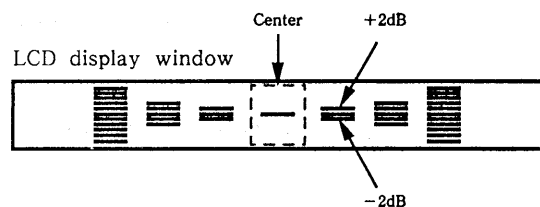
Adjustment method :

Adjustment location : MICRO CPMPUTER PC board
(DIGITAL)



The LCD display shall be in the center (white) when a 1kHz, -30dB input is applied to the input terminal.

Also check for an increase of one scale graduation at the center when the attenuator is switched to $\pm 2\text{dB}$. If the above values cannot be obtained, adjust using RV501.

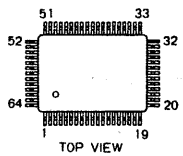


CONDUCTOR (FRONT) SIDE

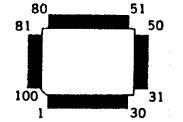
SECTION 3
DIAGRAMS

• SEMICONDUCTOR LEAD LAYOUTS

MB88516B-569K



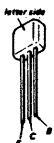
MSM5265GS-K



DTA114ES
DTA144WS
DTC143TS
DTC144ES
DTC144WS
2SA1344



2SA1175-HFE
2SC2785-HFE
2SC3623-L



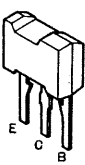
2SA1341



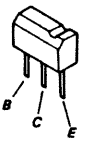
2SA1282-F
2SB985



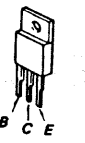
2SA1428Y



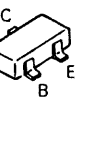
2SC2673



2SB1094-L



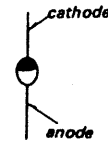
2SC3395



2SK246BL



DSA1A2



• SEMICONDUCTOR LOCATION

Ref. No	Location	Ref. No	Location	Ref. No	Location	Ref. No	Location
IC100	C-9	Q103	D-6	Q455	B-8	D453	E-2
IC101	B-9	Q105	C-6	Q456	B-8	D454	G-3
IC102	D-8	Q107	D-5	Q457	B-6	D456	E-3
IC103	F-7	Q109	C-5	Q458	B-5	D803	C-1
IC104	E-8	Q203	D-5	Q459	B-4	D902	F-3
IC107	F-10	Q205	C-5	Q801	C-2	D903	G-4
IC108	G-4	Q207	D-4	Q901	F-3	D904	F-4
IC109	F-4	Q209	C-4	Q902	F-4	D980	B-3
IC110	E-4	Q301	G-9	Q903	F-3		
IC111	D-6	Q302	G-9	Q904	F-3		
IC112	D-4	Q401	D-10	Q905	F-3		
IC113	B-8	Q402	D-10	Q906	G-3		
IC114	B-6	Q403	E-10	Q981	C-2		
IC115	G-5	Q404	E-10	Q982	C-3		
IC116	F-5	Q451	F-2				
IC117	E-5	Q452	E-2	D401	G-9		
IC120	C-7	Q453	E-2	D450	E-3		
				D451	E-2		

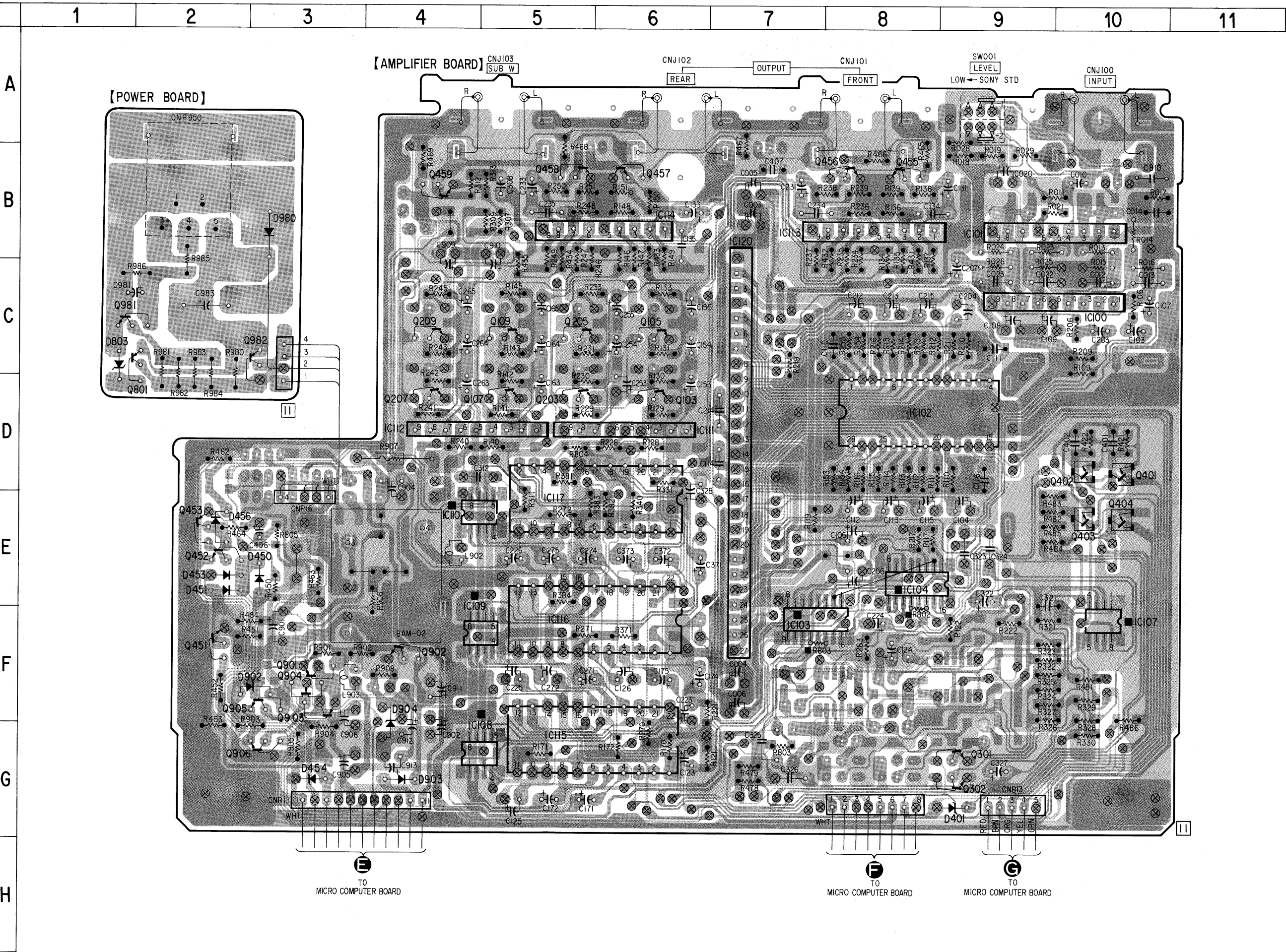
● Note on Schematic Diagram
(AMPLIFIER SECTION)

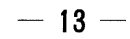
- Note :
- All capacitors are in μF unless otherwise noted. $pF : \mu F$ 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
 - **B+** : B+ Line
 - **B-** : B- Line
 - Voltages are taken with a VOM (50k Ω/V). Voltage variations may be noted due to normal production tolerances.

● Note on Printed Wiring Boards
(AMPLIFIER SECTION)

- Note :
- : parts extracted from the component side.
 - : parts extracted from the conductor side.
 - : parts mounted on the conductor side.
 - : indicates side identified with part number.
 - : Through hole.
 - : Pattern on the side which is seen.
 - : Pattern of the rear side.
 - : Solder bridge.

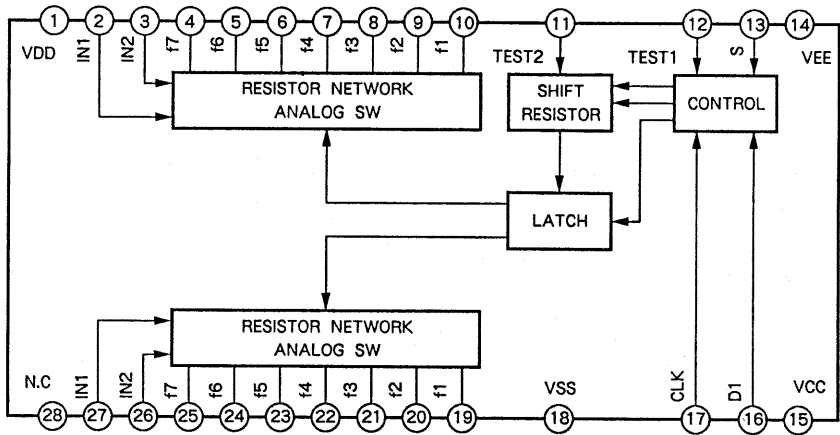
3-1. PRINTED WIRING BOARDS (AMPLIFIER SECTION)



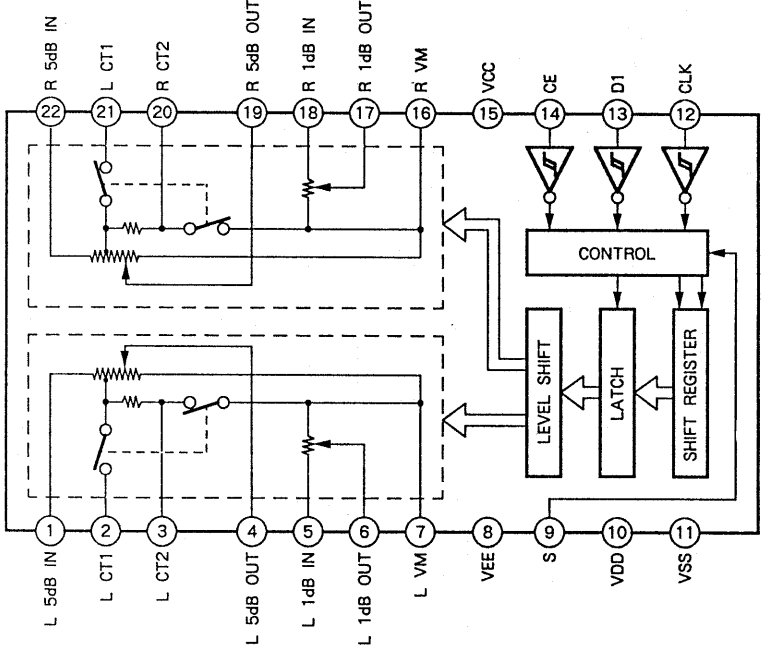


• IC BLOCK DIAGRAMS

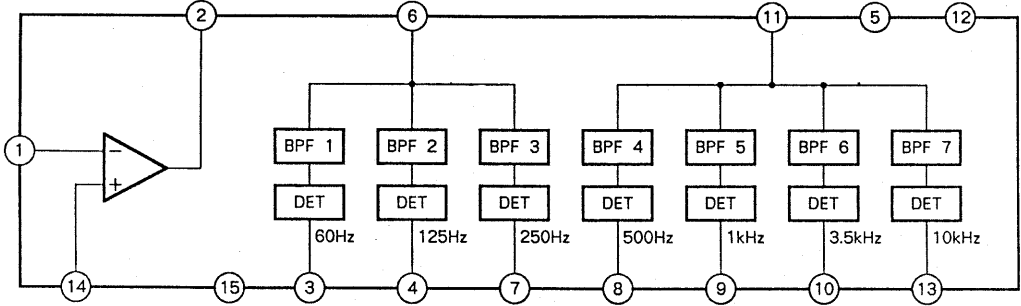
IC102 LC7522



IC115-117 LC7535



IC503 AFM02F

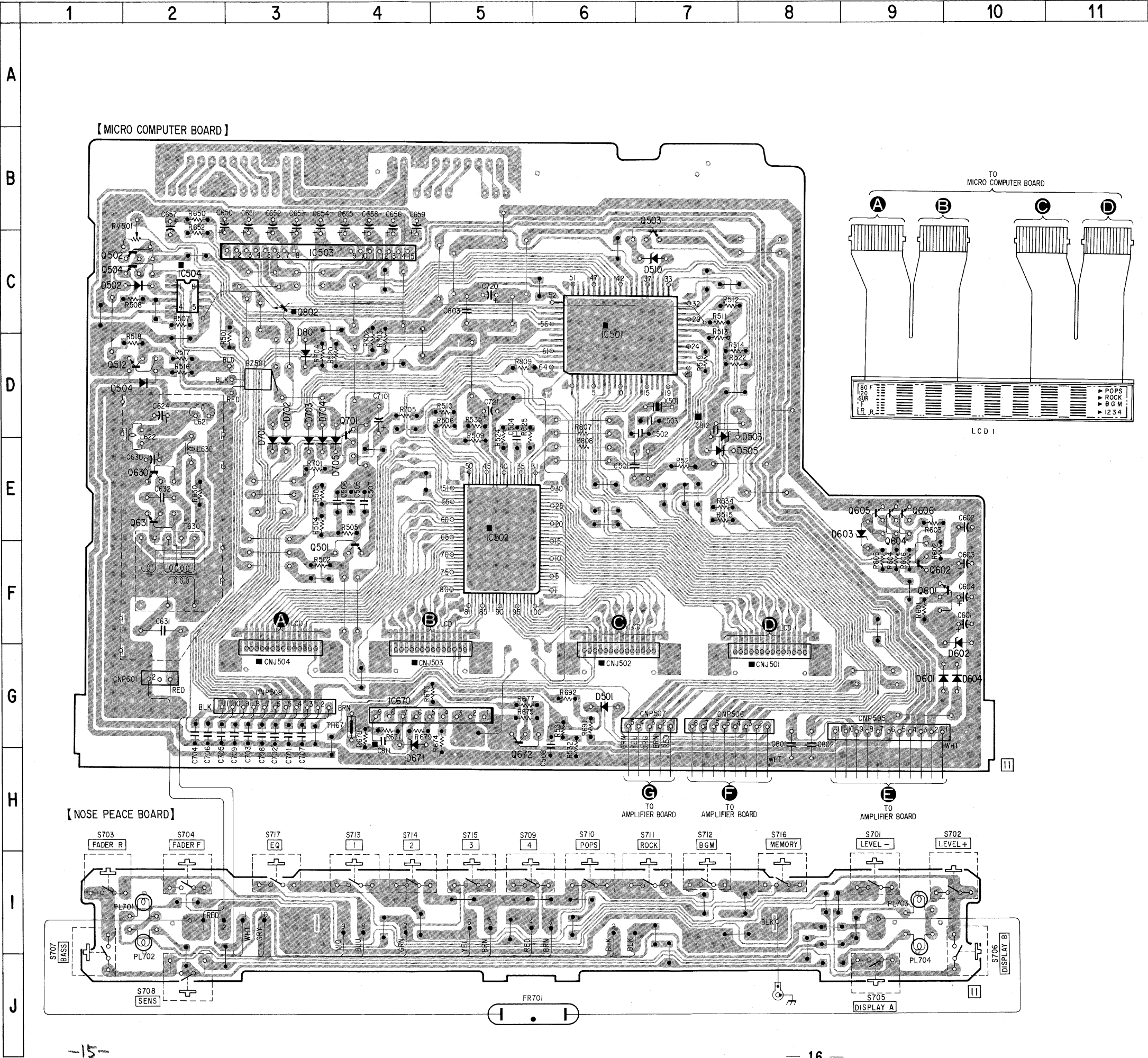


• SEMICONDUCTOR LOCATION

Ref. No	Location
IC501	C-6
IC502	E-5
IC503	C-3
IC504	C-2
IC670	G-4
Q501	F-4
Q502	C-2
Q503	C-7
Q504	C-2
Q512	D-2
Q601	F-9
Q602	F-9
Q604	E-9
Q605	E-9
Q606	E-9
Q630	E-2
Q631	E-2
Q672	G-5
Q701	D-4
Q802	C-3
D501	G-6
D502	C-2
D503	E-7
D504	D-2
D505	E-7
D510	C-7
D601	G-9
D602	G-10
D603	E-9
D604	G-10
D671	G-4
D701	E-3
D702	E-3
D703	E-3
D704	E-3
D705	E-4
D801	D-3

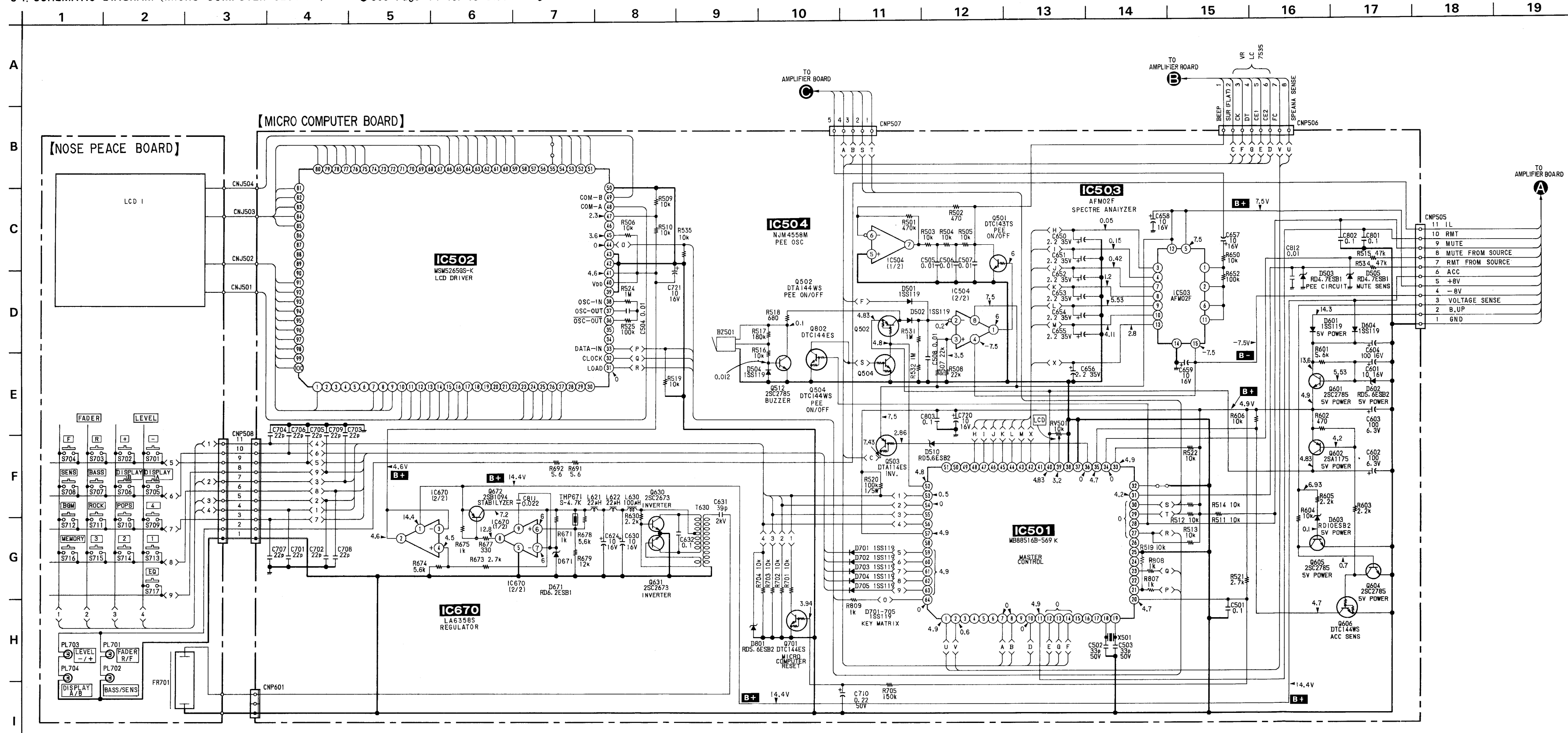
Note :

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.



3-4. SCHEMATIC DIAGRAM (MICRO COMPUTER SECTION) ● See Page 14 for IC Block Diagrams.

● See Page 14 for IC Block Diagrams.



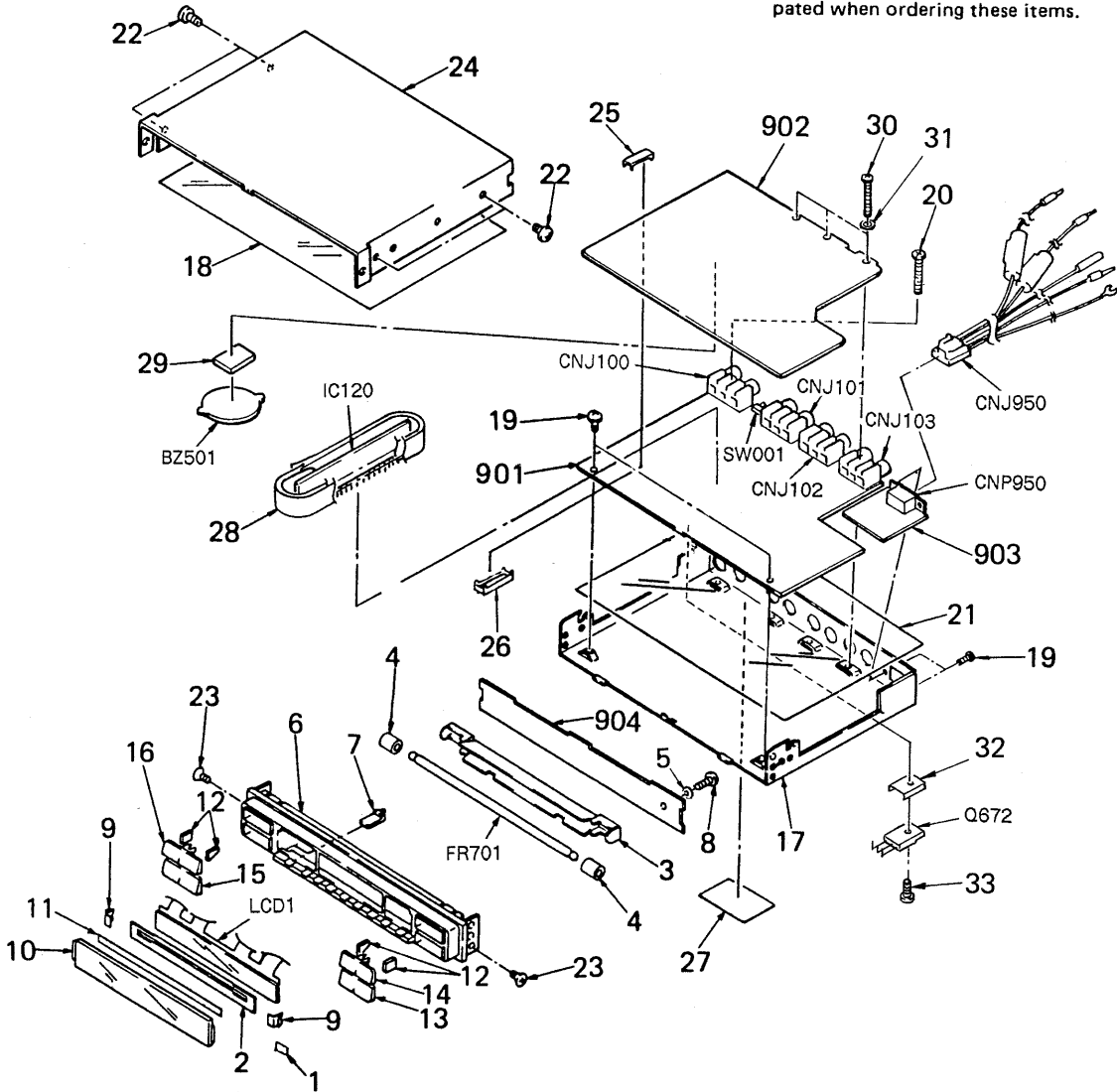
Note :

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- **B+** : B+ Line
- **B-** : B- Line
- Voltages are taken with a VOM (50k Ω/V).
Voltage variations may be noted due to normal production tolerances.

SECTION 4
EXPLODED VIEW

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-831-441-XX	CUSHION		27	★3-350-776-01	(US,E).....LABEL, MODEL NUMBER	
2	3-339-924-01	PLATE, GROUND			3-350-777-01	(Canadian)...LABEL, MODEL NUMBER	
3	3-339-907-01	REFLECTOR			3-350-782-01	(AEP).....LABEL, MODEL NUMBER	
4	★3-339-925-01	TUBE, PROTECTION		28	★3-322-043-01	SHEET, GROUND	
5	3-325-290-21	WASHER		29	9-911-839-XX	CUSHION, FIXED	
6	3-339-916-11	PIECE, NOSE		30	7-621-256-25	SCREW +P 2X20	
7	3-339-905-11	BUTTON, EQ		31	7-688-001-01	W 2, SMALL	
8	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT		32	★3-339-932-01	STOPPER	
9	★3-339-930-01	BRACKET, LCD		33	7-682-546-09	SCREW +B 3X5	
10	3-339-906-21	PLATE, TRANSPARENT		901	★A-3270-735-A	MOUNTED PCB, AUDIO (AMP)	
11	3-339-908-01	SHEET, ADHESIVE		902	★A-3217-408-A	PC BOARD ASSY, DIGITAL (MICON)	
12	3-339-904-01	SLIDER		903	★1-627-228-11	PC BOARD, POWER	
13	3-339-911-21	KNOB, UP/DOWN (LEVEL -/+)		904	★1-627-229-11	PC BOARD, NOSE PEACE	
14	3-339-913-21	KNOB, DSPL/MEM (DISPLAY A/B)		BZ501	1-529-014-00	BUZZER, PIEZOELECTRIC	
15	3-339-912-21	KNOB, FADER (R/F)		CNJ100	1-565-412-11	JACK, PIN 2P (INPUT L/R)	
16	3-339-910-21	KNOB, BASS/SENS		CNJ101	1-565-412-11	JACK, PIN 2P (OUTPUT FRONT L/R)	
17	★3-342-451-02	CASE (LOWER)		CNJ102	1-565-412-11	JACK, PIN 2P (OUTPUT REAR L/R)	
18	★3-339-923-01	SHEET, INSULATING		CNJ103	1-565-412-11	JACK, PIN 2P (SUB W L/R)	
19	7-621-775-15	SCREW +B 2.6X4		CNJ950	1-575-687-11	CORD (WITH CONNECTOR)	
20	7-621-255-85	SCREW +P 2X14		CNP950	★1-566-624-31	CONNECTOR 5P	
21	★3-346-815-01	SHEET (B)		FR701	1-518-622-21	LAMP, FLUORESCENT	
22	7-682-544-09	SCREW +B 3X3		IC120	1-807-891-21	IC GE65062B	
23	7-621-559-20	SCREW +K 2.6X4		LCD1	1-808-456-21	DISPLAY PANEL, LIQUID CRYSTAL	
24	★3-342-450-01	COVER		Q672	8-729-111-67	TRANSISTOR 2SB1094-L	
25	★3-339-928-01	CASE (UPPER), SHIELD		SW001	1-570-875-11	SWITCH, SLIDE (LEVEL LOW/SONY STD)	
26	★3-339-929-01	CASE (LOWER), SHIELD					

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*A-3270-735-A	MOUNTED PCB, AUDIO (AMP)	C172	1-126-282-11	ELECT 10MF 20% 16V
902	*A-3217-408-A	PC BOARD ASSY, DIGITAL (MIC ON)	C174	1-126-282-11	ELECT 10MF 20% 16V
903	*1-627-228-11	PC BOARD, POWER	C175	1-126-282-11	ELECT 10MF 20% 16V
904	*1-627-229-11	PC BOARD, NOSE PEACE			
BAM-02	A-3215-906-A	BATTERY MIRROR (DC-DC CONVERTER UNIT)	C203	1-126-282-11	ELECT 10MF 20% 16V
BZ501	1-529-014-00	BUZZER, PIEZOELECTRIC	C204	1-126-301-11	ELECT 1MF 20% 50V
			C206	1-126-282-11	ELECT 10MF 20% 16V
C03	1-126-282-11	ELECT 10MF 20% 16V	C207	1-126-282-11	ELECT 10MF 20% 16V
C04	1-126-282-11	ELECT 10MF 20% 16V	C212	1-126-282-11	ELECT 10MF 20% 16V
C05	1-126-282-11	ELECT 10MF 20% 16V	C213	1-126-282-11	ELECT 10MF 20% 16V
C06	1-126-282-11	ELECT 10MF 20% 16V	C214	1-162-215-31	CERAMIC 47PF 5% 50V
C010	1-126-282-11	ELECT 10MF 20% 16V	C215	1-126-299-11	ELECT 0.33MF 20% 50V
C012	1-162-215-31	CERAMIC 47PF 5% 50V	C223	1-126-282-11	ELECT 10MF 20% 16V
C013	1-162-215-31	CERAMIC 47PF 5% 50V	C224	1-126-282-11	ELECT 10MF 20% 16V
C014	1-163-059-00	CERAMIC MELF 0.01MF 30% 16V	C225	1-126-282-11	ELECT 10MF 20% 16V
C020	1-126-282-11	ELECT 10MF 20% 16V	C226	1-126-282-11	ELECT 10MF 20% 16V
C022	1-162-215-31	CERAMIC 47PF 5% 50V	C231	1-126-282-11	ELECT 10MF 20% 16V
C023	1-162-215-31	CERAMIC 47PF 5% 50V	C233	1-126-282-11	ELECT 10MF 20% 16V
C103	1-126-282-11	ELECT 10MF 20% 16V	C234	1-162-215-31	CERAMIC 47PF 5% 50V
C104	1-126-301-11	ELECT 1MF 20% 50V	C235	1-162-215-31	CERAMIC 47PF 5% 50V
C106	1-126-282-11	ELECT 10MF 20% 16V	C253	1-126-303-11	ELECT 3.3MF 20% 50V
C107	1-126-282-11	ELECT 10MF 20% 16V	C254	1-126-300-11	ELECT 0.47MF 20% 50V
C108	1-126-282-11	ELECT 10MF 20% 16V	C255	1-126-301-11	ELECT 1MF 20% 50V
C109	1-126-282-11	ELECT 10MF 20% 16V	C263	1-126-303-11	ELECT 3.3MF 20% 50V
C110	1-163-063-00	CERAMIC MELF 0.022MF 25V	C264	1-126-300-11	ELECT 0.47MF 20% 50V
C111	1-163-063-00	CERAMIC MELF 0.022MF 25V	C265	1-126-301-11	ELECT 1MF 20% 50V
C112	1-126-282-11	ELECT 10MF 20% 16V	C271	1-126-282-11	ELECT 10MF 20% 16V
C113	1-126-282-11	ELECT 10MF 20% 16V	C272	1-126-282-11	ELECT 10MF 20% 16V
C114	1-162-215-31	CERAMIC 47PF 5% 50V	C274	1-126-282-11	ELECT 10MF 20% 16V
C115	1-126-299-11	ELECT 0.33MF 20% 50V	C275	1-126-282-11	ELECT 10MF 20% 16V
C116	1-163-063-00	CERAMIC MELF 0.022MF 25V	C308	1-126-282-11	ELECT 10MF 20% 16V
C123	1-126-282-11	ELECT 10MF 20% 16V	C312	1-130-486-00	FILM 0.018MF 5% 50V
C124	1-126-282-11	ELECT 10MF 20% 16V	C321	1-163-173-00	CERAMIC MELF 47PF 5% 50V
C125	1-126-282-11	ELECT 10MF 20% 16V	C322	1-126-276-11	ELECT 47MF 20% 10V
C126	1-126-282-11	ELECT 10MF 20% 16V	C323	1-130-486-00	FILM 0.018MF 5% 50V
C131	1-126-282-11	ELECT 10MF 20% 16V	C324	1-136-833-11	FILM 0.039MF 5% 50V
C133	1-126-282-11	ELECT 10MF 20% 16V	C325	1-130-483-00	FILM 0.01MF 5% 50V
C134	1-162-215-31	CERAMIC 47PF 5% 50V	C326	1-130-487-00	FILM 0.022MF 5% 50V
C135	1-162-215-31	CERAMIC 47PF 5% 50V	C327	1-126-301-11	ELECT 1MF 20% 50V
C153	1-126-303-11	ELECT 3.3MF 20% 50V	C328	1-126-301-11	ELECT 1MF 20% 50V
C154	1-126-300-11	ELECT 0.47MF 20% 50V	C371	1-126-282-11	ELECT 10MF 20% 16V
C155	1-126-301-11	ELECT 1MF 20% 50V	C372	1-126-282-11	ELECT 10MF 20% 16V
C163	1-126-303-11	ELECT 3.3MF 20% 50V	C373	1-126-301-11	ELECT 1MF 20% 50V
C164	1-126-300-11	ELECT 0.47MF 20% 50V	C401	1-163-059-00	CERAMIC MELF 0.01MF 30% 16V
C165	1-126-301-11	ELECT 1MF 20% 50V	C402	1-163-059-00	CERAMIC MELF 0.01MF 30% 16V
C171	1-126-282-11	ELECT 10MF 20% 16V	C406	1-126-282-11	ELECT 10MF 20% 16V

Ref.No.	Part No.	Description			
C407	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C501	1-136-742-11	FILM	0.1MF	5%	50V
C502	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C503	1-163-169-00	CERAMIC MELF	33PF	5%	50V
C504	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C505	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C506	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C507	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C508	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C601	1-126-157-11	ELECT	10MF	20%	16V
C602	1-124-225-00	ELECT	100MF	20%	6.3V
C603	1-124-225-00	ELECT	100MF	20%	6.3V
C604	1-126-101-11	ELECT	100MF	20%	16V
C624	1-126-157-11	ELECT	10MF	20%	16V
C630	1-126-157-11	ELECT	10MF	20%	16V
C631	1-164-494-11	CERAMIC	39PF	5%	2KV
C632	1-130-768-91	FILM	0.1MF	10%	63V
C650	1-124-257-00	ELECT	2.2MF	20%	35V
C651	1-124-257-00	ELECT	2.2MF	20%	35V
C652	1-124-257-00	ELECT	2.2MF	20%	35V
C653	1-124-257-00	ELECT	2.2MF	20%	35V
C654	1-124-257-00	ELECT	2.2MF	20%	35V
C655	1-124-257-00	ELECT	2.2MF	20%	35V
C656	1-124-257-00	ELECT	2.2MF	20%	35V
C657	1-126-157-11	ELECT	10MF	20%	16V
C658	1-126-157-11	ELECT	10MF	20%	16V
C659	1-126-157-11	ELECT	10MF	20%	16V
C701	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C702	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C703	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C704	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C705	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C706	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C707	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C708	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C709	1-163-165-00	CERAMIC MELF	22PF	5%	50V
C710	1-124-464-11	ELECT	0.22MF	20%	50V
C720	1-126-157-11	ELECT	10MF	20%	16V
C721	1-126-157-11	ELECT	10MF	20%	16V
C801	1-136-742-11	FILM	0.1MF	5%	50V
C802	1-136-742-11	FILM	0.1MF	5%	50V
C803	1-136-742-11	FILM	0.1MF	5%	50V
C807	1-124-584-00	ELECT	100MF	20%	10V
C810	1-130-487-00	FILM	0.022MF	5%	50V
C811	1-161-494-00	CERAMIC	0.022MF		25V
C812	1-163-059-00	CERAMIC MELF	0.01MF	30%	16V
C901	1-126-103-11	ELECT	470MF	20%	16V
C902	1-126-284-11	ELECT	33MF	20%	16V
C904	1-126-274-11	ELECT	22MF	20%	10V
C905	1-126-276-11	ELECT	47MF	20%	10V
C906	1-126-276-11	ELECT	47MF	20%	10V
C909	1-126-282-11	ELECT	10MF	20%	16V
C910	1-126-282-11	ELECT	10MF	20%	16V
C911	1-126-303-11	ELECT	3.3MF	20%	50V
C912	1-126-269-11	ELECT	22MF	20%	6.3V
C913	1-126-269-11	ELECT	22MF	20%	6.3V
C981	1-124-257-00	ELECT	2.2MF	20%	50V
C983	1-124-343-00	ELECT	2200MF	20%	16V

Ref.No.	Part No.	Description
CNJ100	1-565-412-11	JACK, PIN 2P (INPUT L/R)
CNJ101	1-565-412-11	JACK, PIN 2P (OUTPUT FRONT L/R)
CNJ102	1-565-412-11	JACK, PIN 2P (OUTPUT REAR L/R)
CNJ103	1-565-412-11	JACK, PIN 2P (SUB W L/R)
CNJ501	1-566-530-11	CONNECTOR, FPC (ZIF) 14P
CNJ502	1-566-530-11	CONNECTOR, FPC (ZIF) 14P
CNJ503	1-566-530-11	CONNECTOR, FPC (ZIF) 14P
CNJ504	1-566-530-11	CONNECTOR, FPC (ZIF) 14P
CNJ950	1-575-687-11	CORD (WITH CONNECTOR)
CNP16	1-506-470-11	PIN, CONNECTOR 5P
CNP505*1	1-566-008-11	PIN, CONNECTOR (PC BOARD) 11P
CNP506*1	1-564-018-51	PIN, CONNECTOR 8P
CNP507*1	1-566-002-11	PIN, CONNECTOR 5P
CNP508*1	1-566-008-11	PIN, CONNECTOR (PC BOARD) 11P
CNP601*1	1-564-013-51	PIN, CONNECTOR 3P
CNP950*1	1-566-624-31	CONNECTOR 5P
D401	8-719-109-71	DIODE RD3.9ES-B1
D450	8-719-911-19	DIODE 1SS119
D451	8-719-911-19	DIODE 1SS119
D453	8-719-911-19	DIODE 1SS119
D454	8-719-110-02	DIODE RD7.5ES-B1
D456	8-719-911-19	DIODE 1SS119
D501	8-719-911-19	DIODE 1SS119
D502	8-719-911-19	DIODE 1SS119
D503	8-719-109-80	DIODE RD4.7ES-B1
D504	8-719-911-19	DIODE 1SS119
D505	8-719-109-80	DIODE RD4.7ES-B1
D510	8-719-109-89	DIODE RD5.6ES-B2
D601	8-719-911-19	DIODE 1SS119
D602	8-719-109-89	DIODE RD5.6ES-B2
D603	8-719-110-07	DIODE RD10ES-B2
D604	8-719-911-19	DIODE 1SS119
D671	8-719-109-92	DIODE RD6.2ES-B1
D701	8-719-911-19	DIODE 1SS119
D702	8-719-911-19	DIODE 1SS119
D703	8-719-911-19	DIODE 1SS119
D704	8-719-911-19	DIODE 1SS119
D705	8-719-911-19	DIODE 1SS119
D801	8-719-109-89	DIODE RD5.6ES-B2
D803	8-719-110-42	DIODE RD15ES-B3
D902	8-719-109-71	DIODE RD3.9ES-B1
D903	8-719-911-19	DIODE 1SS119
D904	8-719-109-75	DIODE RD4.3ES-B2
D980	8-719-928-26	DIODE DSA1A2
FR701	1-518-622-21	LAMP, FLUORESCENT
IC100	8-759-710-73	IC NJM4580L
IC101	8-759-710-73	IC NJM4580L
IC102	8-759-804-49	IC LC7522
IC103	8-759-103-25	IC UPD4053BG
IC104	8-759-103-25	IC UPD4053BG
IC107	8-759-981-92	IC RC4558M
IC108	8-759-981-92	IC RC4558M
IC109	8-759-981-92	IC RC4558M
IC110	8-759-981-92	IC RC4558M
IC111	8-759-600-02	IC M5218L
IC112	8-759-600-02	IC M5218L
IC113	8-759-600-02	IC M5218L

Ref.No.	Part No.	Description
IC114	8-759-600-02	IC M5218L
IC115	8-759-820-11	IC LC7535
IC116	8-759-820-11	IC LC7535
IC117	8-759-820-11	IC LC7535
IC120	1-807-891-21	IC GE65062B
IC501	8-759-977-75	IC MB88516B-569K
IC502	8-759-941-24	IC MSM5265GS-K
IC503	1-807-817-21	IC AFM02F002-X3
IC504	8-759-981-92	IC RC4558M
IC670	8-759-802-43	IC LA6358S
L621	1-421-635-00	COIL, CHOKE
L622	1-421-635-00	COIL, CHOKE
L630	1-421-967-11	COIL, CHOKE 100UH
L902	1-408-948-00	INDUCTOR 220UH
L903	1-408-948-00	INDUCTOR 220UH
LCD1	1-808-456-21	DISPLAY PANEL, LIQUID CRYSTAL
PL701	1-518-626-11	LAMP, PILOT
PL702	1-518-626-11	LAMP, PILOT
PL703	1-518-626-11	LAMP, PILOT
PL704	1-518-626-11	LAMP, PILOT
Q103	8-729-900-74	TRANSISTOR DTC143TS
Q105	8-729-900-74	TRANSISTOR DTC143TS
Q107	8-729-900-74	TRANSISTOR DTC143TS
Q109	8-729-900-74	TRANSISTOR DTC143TS
Q203	8-729-900-74	TRANSISTOR DTC143TS
Q205	8-729-900-74	TRANSISTOR DTC143TS
Q207	8-729-900-74	TRANSISTOR DTC143TS
Q209	8-729-900-74	TRANSISTOR DTC143TS
Q301	8-729-900-74	TRANSISTOR DTC143TS
Q302	8-729-900-74	TRANSISTOR DTC143TS
Q401	8-729-805-45	TRANSISTOR 2SC3395
Q402	8-729-805-45	TRANSISTOR 2SC3395
Q403	8-729-805-69	TRANSISTOR 2SA1341
Q404	8-729-805-65	TRANSISTOR 2SA1344
Q451	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q452	8-729-900-89	TRANSISTOR DTC144ES
Q453	8-729-900-61	TRANSISTOR DTA114ES
Q455	8-729-107-77	TRANSISTOR 2SC3623-L
Q456	8-729-107-77	TRANSISTOR 2SC3623-L
Q457	8-729-107-77	TRANSISTOR 2SC3623-L
Q458	8-729-107-77	TRANSISTOR 2SC3623-L
Q459	8-729-107-77	TRANSISTOR 2SC3623-L
Q501	8-729-900-74	TRANSISTOR DTC143TS
Q502	8-729-900-69	TRANSISTOR DTA144WS
Q503	8-729-900-61	TRANSISTOR DTA114ES
Q504	8-729-900-85	TRANSISTOR DTC144WS
Q512	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q602	8-729-119-78	TRANSISTOR 2SA1175-HFE
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q606	8-729-900-85	TRANSISTOR DTC144WS
Q630	8-729-967-32	TRANSISTOR 2SC2673
Q631	8-729-967-32	TRANSISTOR 2SC2673
Q672	8-729-111-67	TRANSISTOR 2SB1094-L
Q701	8-729-900-89	TRANSISTOR DTC144ES

Ref.No.	Part No.	Description
Q801	8-729-900-61	TRANSISTOR DTA114ES
Q802	8-729-900-89	TRANSISTOR DTC144ES
Q901	8-729-205-95	TRANSISTOR 2SA1428Y
Q902	8-729-900-89	TRANSISTOR DTC144ES
Q903	8-729-600-82	TRANSISTOR 2SA1282-F
Q904	8-729-224-63	TRANSISTOR 2SK246BL
Q905	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q906	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q981	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q982	8-729-804-25	TRANSISTOR 2SB985
R011	1-249-441-11	CARBON MELF 100K 5% 1/5W
R013	1-215-447-00	METAL 12K 1% 1/6W
R014	1-215-447-00	METAL 12K 1% 1/6W
R015	1-215-445-00	METAL 10K 1% 1/6W
R016	1-215-445-00	METAL 10K 1% 1/6W
R021	1-249-441-11	CARBON MELF 100K 5% 1/5W
R023	1-215-447-00	METAL 12K 1% 1/6W
R024	1-215-447-00	METAL 12K 1% 1/6W
R025	1-215-445-00	METAL 10K 1% 1/6W
R026	1-215-445-00	METAL 10K 1% 1/6W
R017	1-249-417-11	CARBON MELF 1K 5% 1/5W
R018	1-249-430-11	CARBON MELF 12K 5% 1/5W
R019	1-249-432-11	CARBON MELF 18K 5% 1/5W
R028	1-249-430-11	CARBON MELF 12K 5% 1/5W
R029	1-249-432-11	CARBON MELF 18K 5% 1/5W
R106	1-249-405-11	CARBON MELF 100 5% 1/5W
R109	1-249-441-11	CARBON MELF 100K 5% 1/5W
R110	1-249-441-11	CARBON MELF 100K 5% 1/5W
R111	1-249-441-11	CARBON MELF 100K 5% 1/5W
R112	1-249-441-11	CARBON MELF 100K 5% 1/5W
R113	1-249-441-11	CARBON MELF 100K 5% 1/5W
R114	1-249-441-11	CARBON MELF 100K 5% 1/5W
R115	1-249-441-11	CARBON MELF 100K 5% 1/5W
R116	1-249-441-11	CARBON MELF 100K 5% 1/5W
R117	1-249-441-11	CARBON MELF 100K 5% 1/5W
R119	1-249-429-11	CARBON MELF 10K 5% 1/5W
R121	1-215-477-00	CARBON MELF 220K 5% 1/5W
R122	1-215-477-00	CARBON MELF 220K 5% 1/5W
R128	1-215-485-00	CARBON MELF 470K 5% 1/5W
R129	1-249-417-11	CARBON MELF 1K 5% 1/5W
R130	1-215-477-00	CARBON MELF 220K 5% 1/5W
R131	1-249-427-11	CARBON MELF 6.8K 5% 1/5W
R133	1-215-485-00	CARBON MELF 470K 5% 1/5W
R134	1-215-493-00	CARBON MELF 1M 5% 1/5W
R135	1-249-417-11	CARBON MELF 1K 5% 1/5W
R136	1-249-426-11	CARBON MELF 5.6K 5% 1/5W
R137	1-249-421-11	CARBON MELF 2.2K 5% 1/5W
R138	1-249-417-11	CARBON MELF 1K 5% 1/5W
R139	1-249-429-11	CARBON MELF 10K 5% 1/5W
R140	1-215-485-00	CARBON MELF 470K 5% 1/5W
R141	1-249-417-11	CARBON MELF 1K 5% 1/5W
R142	1-215-477-00	CARBON MELF 220K 5% 1/5W
R143	1-249-427-11	CARBON MELF 6.8K 5% 1/5W
R145	1-215-485-00	CARBON MELF 470K 5% 1/5W
R146	1-215-493-00	CARBON MELF 1M 5% 1/5W
R147	1-249-417-11	CARBON MELF 1K 5% 1/5W
R148	1-249-426-11	CARBON MELF 5.6K 5% 1/5W
R149	1-249-421-11	CARBON MELF 2.2K 5% 1/5W

Ref.No.	Part No.	Description			
R150	1-249-417-11	CARBON MELF	1K	5%	1/5W
R151	1-249-429-11	CARBON MELF	10K	5%	1/5W
R153	1-249-441-11	CARBON MELF	100K	5%	1/5W
R154	1-249-441-11	CARBON MELF	100K	5%	1/5W
R170	1-215-477-00	CARBON MELF	220K	5%	1/5W
R171	1-215-485-00	CARBON MELF	470K	5%	1/5W
R172	1-215-485-00	CARBON MELF	470K	5%	1/5W
R206	1-249-405-11	CARBON MELF	100	5%	1/5W
R209	1-249-441-11	CARBON MELF	100K	5%	1/5W
R210	1-249-441-11	CARBON MELF	100K	5%	1/5W
R211	1-249-441-11	CARBON MELF	100K	5%	1/5W
R212	1-249-441-11	CARBON MELF	100K	5%	1/5W
R213	1-249-441-11	CARBON MELF	100K	5%	1/5W
R214	1-249-441-11	CARBON MELF	100K	5%	1/5W
R215	1-249-441-11	CARBON MELF	100K	5%	1/5W
R216	1-249-441-11	CARBON MELF	100K	5%	1/5W
R217	1-249-441-11	CARBON MELF	100K	5%	1/5W
R219	1-249-429-11	CARBON MELF	10K	5%	1/5W
R221	1-215-477-00	CARBON MELF	220K	5%	1/5W
R222	1-215-477-00	CARBON MELF	220K	5%	1/5W
R228	1-215-485-00	CARBON MELF	470K	5%	1/5W
R229	1-249-417-11	CARBON MELF	1K	5%	1/5W
R230	1-215-477-00	CARBON MELF	220K	5%	1/5W
R231	1-249-427-11	CARBON MELF	6.8K	5%	1/5W
R233	1-215-485-00	CARBON MELF	470K	5%	1/5W
R234	1-215-493-00	CARBON MELF	1M	5%	1/5W
R235	1-249-417-11	CARBON MELF	1K	5%	1/5W
R236	1-249-426-11	CARBON MELF	5.6K	5%	1/5W
R237	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R238	1-249-417-11	CARBON MELF	1K	5%	1/5W
R239	1-249-429-11	CARBON MELF	10K	5%	1/5W
R240	1-215-485-00	CARBON MELF	470K	5%	1/5W
R241	1-249-417-11	CARBON MELF	1K	5%	1/5W
R242	1-215-477-00	CARBON MELF	220K	5%	1/5W
R243	1-249-427-11	CARBON MELF	6.8K	5%	1/5W
R245	1-215-485-00	CARBON MELF	470K	5%	1/5W
R246	1-215-493-00	CARBON MELF	1M	5%	1/5W
R247	1-249-417-11	CARBON MELF	1K	5%	1/5W
R248	1-249-426-11	CARBON MELF	5.6K	5%	1/5W
R249	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R250	1-249-417-11	CARBON MELF	1K	5%	1/5W
R251	1-249-429-11	CARBON MELF	10K	5%	1/5W
R253	1-249-441-11	CARBON MELF	100K	5%	1/5W
R254	1-249-441-11	CARBON MELF	100K	5%	1/5W
R270	1-215-477-00	CARBON MELF	220K	5%	1/5W
R271	1-215-485-00	CARBON MELF	470K	5%	1/5W
R272	1-215-485-00	CARBON MELF	470K	5%	1/5W
R307	1-249-441-11	CARBON MELF	100K	5%	1/5W
R309	1-249-424-11	CARBON MELF	3.9K	5%	1/5W
R311	1-249-436-11	CARBON MELF	39K	5%	1/5W
R312	1-249-417-11	CARBON MELF	1K	5%	1/5W
R313	1-249-429-11	CARBON MELF	10K	5%	1/5W
R321	1-249-434-11	CARBON MELF	27K	5%	1/5W
R322	1-249-431-11	CARBON MELF	15K	5%	1/5W
R323	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R324	1-215-477-00	CARBON MELF	220K	5%	1/5W
R325	1-215-477-00	CARBON MELF	220K	5%	1/5W

Ref.No.	Part No.	Description			
R326	1-249-441-11	CARBON MELF	100K	5%	1/5W
R327	1-249-441-11	CARBON MELF	100K	5%	1/5W
R328	1-249-437-11	CARBON MELF	47K	5%	1/5W
R329	1-249-417-11	CARBON MELF	1K	5%	1/5W
R330	1-215-493-00	CARBON MELF	1M	5%	1/5W
R331	1-215-477-00	CARBON MELF	220K	5%	1/5W
R340	1-249-441-11	CARBON MELF	100K	5%	1/5W
R371	1-215-485-00	CARBON MELF	470K	5%	1/5W
R381	1-249-430-11	CARBON MELF	12K	5%	1/5W
R382	1-249-430-11	CARBON MELF	12K	5%	1/5W
R383	1-249-430-11	CARBON MELF	12K	5%	1/5W
R384	1-249-430-11	CARBON MELF	12K	5%	1/5W
R421	1-249-429-11	CARBON MELF	10K	5%	1/5W
R422	1-249-437-11	CARBON MELF	47K	5%	1/5W
R431	1-215-485-00	CARBON MELF	470K	5%	1/5W
R432	1-215-485-00	CARBON MELF	470K	5%	1/5W
R433	1-215-485-00	CARBON MELF	470K	5%	1/5W
R434	1-215-485-00	CARBON MELF	470K	5%	1/5W
R435	1-215-493-00	CARBON MELF	1M	5%	1/5W
R450	1-249-429-11	CARBON MELF	10K	5%	1/5W
R451	1-249-433-11	CARBON MELF	22K	5%	1/5W
R452	1-249-429-11	CARBON MELF	10K	5%	1/5W
R453	1-249-433-11	CARBON MELF	22K	5%	1/5W
R454	1-249-429-11	CARBON MELF	10K	5%	1/5W
R462	1-249-429-11	CARBON MELF	10K	5%	1/5W
R463	1-249-429-11	CARBON MELF	10K	5%	1/5W
R464	1-249-408-11	CARBON MELF	180	5%	1/5W
R465	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R466	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R467	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R468	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R469	1-249-425-11	CARBON MELF	4.7K	5%	1/5W
R478	1-249-417-11	CARBON MELF	1K	5%	1/5W
R479	1-249-433-11	CARBON MELF	22K	5%	1/5W
R481	1-249-437-11	CARBON MELF	47K	5%	1/5W
R482	1-249-417-11	CARBON MELF	1K	5%	1/5W
R483	1-249-437-11	CARBON MELF	47K	5%	1/5W
R484	1-249-417-11	CARBON MELF	1K	5%	1/5W
R485	1-249-437-11	CARBON MELF	47K	5%	1/5W
R486	1-249-429-11	CARBON MELF	10K	5%	1/5W
R501	1-215-485-00	CARBON MELF	470K	5%	1/5W
R502	1-249-413-11	CARBON MELF	470	5%	1/5W
R503	1-249-429-11	CARBON MELF	10K	5%	1/5W
R504	1-249-429-11	CARBON MELF	10K	5%	1/5W
R505	1-249-429-11	CARBON MELF	10K	5%	1/5W
R506	1-249-429-11	CARBON MELF	10K	5%	1/5W
R507	1-249-433-11	CARBON MELF	22K	5%	1/5W
R508	1-249-433-11	CARBON MELF	22K	5%	1/5W
R509	1-249-429-11	CARBON MELF	10K	5%	1/5W
R510	1-249-429-11	CARBON MELF	10K	5%	1/5W
R511	1-249-429-11	CARBON MELF	10K	5%	1/5W
R512	1-249-429-11	CARBON MELF	10K	5%	1/5W
R513	1-249-429-11	CARBON MELF	10K	5%	1/5W
R514	1-249-429-11	CARBON MELF	10K	5%	1/5W
R515	1-249-437-11	CARBON MELF	47K	5%	1/5W
R516	1-249-429-11	CARBON MELF	10K	5%	1/5W
R517	1-247-885-00	CARBON MELF	180K	5%	1/5W

Ref.No.	Part No.	Description			
R518	1-249-035-00	CARBON MELF	680	5%	1/5W
R519	1-249-429-11	CARBON MELF	10K	5%	1/5W
R520	1-249-441-11	CARBON MELF	100K	5%	1/5W
R521	1-249-422-11	CARBON MELF	2.7K	5%	1/5W
R522	1-249-429-11	CARBON MELF	10K	5%	1/5W
R524	1-215-493-00	CARBON MELF	1M	5%	1/5W
R525	1-249-441-11	CARBON MELF	100K	5%	1/5W
R531	1-215-493-00	CARBON MELF	1M	5%	1/5W
R532	1-215-493-00	CARBON MELF	1M	5%	1/5W
R534	1-249-437-11	CARBON MELF	47K	5%	1/5W
R535	1-249-429-11	CARBON MELF	10K	5%	1/5W
R601	1-249-426-11	CARBON MELF	5.6K	5%	1/5W
R602	1-249-413-11	CARBON MELF	470	5%	1/5W
R603	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R604	1-249-429-11	CARBON MELF	10K	5%	1/5W
R605	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R606	1-249-429-11	CARBON MELF	10K	5%	1/5W
R630	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R650	1-249-429-11	CARBON MELF	10K	5%	1/5W
R652	1-249-441-11	CARBON MELF	100K	5%	1/5W
R671	1-249-417-11	CARBON MELF	1K	5%	1/5W
R673	1-249-422-11	CARBON MELF	2.7K	5%	1/5W
R674	1-249-426-11	CARBON MELF	5.6K	5%	1/5W
R675	1-249-417-11	CARBON MELF	1K	5%	1/5W
R677	1-249-411-11	CARBON MELF	330	5%	1/5W
R678	1-249-426-11	CARBON MELF	5.6K	5%	1/5W
R679	1-249-430-11	CARBON MELF	12K	5%	1/5W
R691	1-249-390-11	CARBON MELF	5.6	5%	1/5W
R692	1-249-390-11	CARBON MELF	5.6	5%	1/5W
R701	1-249-429-11	CARBON MELF	10K	5%	1/5W
R702	1-249-429-11	CARBON MELF	10K	5%	1/5W
R703	1-249-429-11	CARBON MELF	10K	5%	1/5W
R704	1-249-429-11	CARBON MELF	10K	5%	1/5W
R705	1-215-473-00	CARBON MELF	150K	5%	1/5W
R802	1-215-493-00	CARBON MELF	1M	5%	1/5W
R803	1-215-493-00	CARBON MELF	1M	5%	1/5W
R804	1-249-437-11	CARBON MELF	47K	5%	1/5W
R805	1-249-417-11	CARBON MELF	1K	5%	1/5W
R807	1-249-417-11	CARBON MELF	1K	5%	1/5W
R808	1-249-417-11	CARBON	1K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R901	1-249-429-11	CARBON MELF	10K	5%	1/5W
R902	1-249-420-11	CARBON MELF	1.8K	5%	1/5W
R903	1-249-419-11	CARBON MELF	1.5K	5%	1/5W
R904	1-249-436-11	CARBON MELF	39K	5%	1/5W
R905	1-249-437-11	CARBON MELF	47K	5%	1/5W
R906	1-249-420-11	CARBON MELF	1.8K	5%	1/5W
R907	1-217-587-61	RES, SHORT	0.01	5%	1/5W
R908	1-249-420-11	CARBON MELF	1.8K	5%	1/5W
R980	1-249-429-11	CARBON MELF	10K	5%	1/5W
R981	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R982	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R983	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R984	1-249-421-11	CARBON MELF	2.2K	5%	1/5W
R985	1-249-424-11	CARBON MELF	3.9K	5%	1/5W
R986	1-249-417-11	CARBON MELF	1K	5%	1/5W
RV501	1-228-994-00	RES, ADJ, CARBON 10K (LCD)			

Ref.No.	Part No.	Description
S701	1-554-813-41	SWITCH, KEY BOARD (LEVEL -)
S702	1-554-813-41	SWITCH, KEY BOARD (LEVEL +)
S703	1-554-813-41	SWITCH, KEY BOARD (FADER R)
S704	1-554-813-41	SWITCH, KEY BOARD (FADER F)
S705	1-554-813-41	SWITCH, KEY BOARD (DISPLAY A)
S706	1-554-813-41	SWITCH, KEY BOARD (DISPLAY B)
S707	1-554-813-41	SWITCH, KEY BOARD (BASS)
S708	1-554-813-41	SWITCH, KEY BOARD (SENS)
S709	1-554-813-41	SWITCH, KEY BOARD (4)
S710	1-554-813-41	SWITCH, KEY BOARD (POPS)
S711	1-554-813-41	SWITCH, KEY BOARD (ROCK)
S712	1-554-813-41	SWITCH, KEY BOARD (BGM)
S713	1-554-813-41	SWITCH, KEY BOARD (10)
S714	1-554-813-41	SWITCH, KEY BOARD (2)
S715	1-554-813-41	SWITCH, KEY BOARD (3)
S716	1-554-813-41	SWITCH, KEY BOARD (MEMORY)
S717	1-554-813-41	SWITCH, KEY BOARD (EQ)
SW001	1-570-875-11	SWITCH, SLIDE (LEVEL LOW/SONY STD)
T630	1-448-886-11	TRANSFORMER, DC-DC CONVERTER
THP671	1-800-944-11	THERMISTOR TH-4700
X501	1-567-839-11	VIBRATOR, CERAMIC

ACCESSORY & PACKING MATERIAL

3-315-746-01	STOPPER (SMALL)
3-331-323-01	CUSHION (J)
3-336-617-01	BAG, PROTECTION
3-751-539-11	(AEP,E).....MANUAL, INSTRUCTION
3-751-539-21	(US,Canadian)...MANUAL, INSTRUCTION
3-751-539-41	(E).....MANUAL, INSTRUCTION
3-751-540-12	(AEP,E).....MANUAL, INSTRUCTION
3-751-540-21	(US,Canadian)...MANUAL, INSTRUCTION
3-751-540-41	(E).....MANUAL, INSTRUCTION
*3-350-779-01	INDIVIDUAL CARTON
*3-764-869-11	(E)...INSTRUCTION, DBP CAUTION

ROUTING HARDWARE

No.	Part No.	Description
501	3-310-655-01	SUPPORT (ND), FITTING
502	X-3315-702-1	SCREW ASSY (25MM), FITTING
503	3-315-736-21	BRACKET, NEW D
504	3-339-927-01	SPACER
505	7-682-261-09	SCREW +K 4X8

